CURRENT LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims:

1 – 68 (cancelled without prejudice)

69. (previously presented) A current operation modeling method, comprising:

integrating transaction data for a commercial enterprise in accordance with a common data dictionary;

using a neural network model to identify one or more value driver candidates for each of one or more elements of value from said data,

using an induction model to identify one or more value drivers from said candidates and define a contribution summary for each element of value for each of one or more aspects of a current operation financial performance using said value drivers, and

creating a plurality of network models that connect the elements of value to aspects of current operation financial performance using said contribution summaries

where the elements of value are selected from the group consisting of brands, customers, employees, intellectual capital, partners, vendors, vendor relationships and combinations thereof,

where the induction models are selected from the group consisting of lagrange, path analysis and entropy minimization,

where the network models support automated analysis through computational techniques and

where the aspects of current operation financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof.

70. (currently amended) The method of claim 69 wherein the method further comprises using ~~the~~a plurality of network models of aspects of current operation financial performance to complete analyses selected from the group consisting of identifying one or more changes to one or more elements of value that will optimize one or more aspects of enterprise financial performance, identifying a net value contribution of each element of value, identifying a net impact of element of value changes on one or more aspects of enterprise financial performance, creating one or more usable forecasts without the use of a reconciliation

Serial No. 09/761,671   - 3 -   Examiner: Yehdega Retta
                                                              Art Unit: 3622

system, identifying one or more transaction changes that will optimize one or more aspects of financial performance and combinations thereof.

71. (previously presented) The method of claim 70 wherein a Markov Chain Monte Carlo model is used to identify the changes that will optimize one aspect of enterprise financial performance, genetic algorithms are used to identify changes that will optimize one or more aspects of enterprise financial performance or multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of enterprise financial performance.

73. (previously presented) The program storage device of claim 70 wherein the analyses are calculated for a specific point in time within a sequential series of points in time.

73. (previously presented) The method of claim 69 wherein a transaction is any event that is logged or recorded.

74. (currently amended) The method of claim 69 wherein theeach of a plurality of network models are causal network models.

75. (previously presented) The method of claim 74 where the causal network models identify a net contribution of each element of value to the value of each aspect of current operation financial performance over time where the net contribution of each element of value to each aspect of current operation financial performance further comprises the direct element contribution net of its impact on other elements of value.

76. (previously presented) The method of claim 69 wherein the data dictionary defines attributes selected from the group consisting of account numbers, components of value, currencies, elements of value, units of measure, time periods and combinations thereof.

77. (currently amended) A program storage device readable by machine, tangibly embodying a program of instructions executable by a machine to perform method steps for performing a current operation method, the method steps comprising:
    converting and integrating transaction data for a commercial enterprise by element of value in accordance with a common data dictionary;

Serial No. 09/761,671   - 4 -   Examiner: Yehdega Retta
                                                                              Art Unit: 3622

using a sequence of analytical time series models to create a causal contribution summary for each of one or more elements of value for each of one or more aspects of current operation financial performance,

creating a plurality of network models that connect the elements of value to a value of each of one or more aspects of current operation financial performance over time using said contribution summaries,

completing analyses of one or more of the plurality of network models wherein the analyses are selected from the group consisting of identifying one or more changes to elements of value that will optimize one or more aspects of current operation financial performance, identifying a current operation value contribution of each element of value, identifying an impact of element of value changes on one or more aspects of current operation financial performance, creating one or more usable forecasts without the use of a reconciliation system, identifying one or more transaction changes that will optimize one or more aspects of financial performance and combinations thereof, and

displaying the results of the analyses.

where the elements of value are selected from the group consisting of brands, customers, customer relationships, employees, employee relationships, intellectual capital, partners, vendors, vendor relationships and combinations thereof,

where the network models support automated analysis through computational techniques, and

where the aspects of current operation financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value, raw material expense, manufacturing expense, service delivery expense, sales expense, support expense, other expense, change in cash, change in non-cash financial assets and combinations thereof.

78. (previously presented) The program storage device of claim 77 wherein the analyses are calculated for a specific point in time within a sequential series of points in time.

79. (previously presented) The program storage device of claim 77 wherein the sequence of analytical time series models further comprise a neural network model and an induction model.

80. (previously presented) The program storage device of claim 79 wherein a sequence of models complete analyses selected from the group consisting of a value driver candidate

Serial No. 09/761,671   - 5 -

selection analysis, a value driver identification and contribution summary creation analysis, a causal component of value model development analysis and an element contribution percentage determination analysis and combinations thereof.

81. (currently amended) The program storage device of claim 77 wherein ~~the net~~a contribution of ~~each~~ an element of value to an aspect of current operation financial performance further comprises ~~the direct element~~ a total contribution ~~net of its impact on other elements~~ all value drivers associated with an element of value.

82. (currently amended) The program storage device of claim ~~77 that supports the identification of a net percentage of one or more subcomponents of value that is caused by each element or sub-element of value~~ 81 wherein a value driver further comprises an item performance indicator selected for inclusion by an induction algorithm.

83. (currently amended) The program storage device of claim 77 wherein ~~enterprise-related~~ transaction data for a commercial enterprise are obtained from systems selected from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet and combinations thereof.

84. (currently amended) The program storage device of claim 77 wherein ~~the~~an element of value contribution ~~summaries~~summary further ~~comprise~~comprises a composite variable~~s~~.

85. (previously presented) An optimization apparatus, comprising:
    a plurality of enterprise transaction systems,
    means for integrating and converting data from said systems in accordance with a common data dictionary by element of value,
    means for analyzing at least a portion of said data to create a plurality of network models that identify a contribution for each of one or more elements of value to one or more aspects of current operation financial performance using said data,
    means for using said models to identify one or more changes by element of value that will optimize one or more aspects of current operation financial performance, and
    means for displaying the identified changes

Serial No. 09/761,671   - 6 -

Examiner: Yehdega Retta
Art Unit: 3622

where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof,

where the network models support automated analysis through computational techniques, and

where the elements of value are selected from the group consisting of brands, customers, employees, intellectual capital, partners, vendors, vendor relationships and combinations thereof.

86. (previously presented) The apparatus of claim 85 wherein enterprise transaction systems are selected from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems and combinations thereof.

87. (previously presented) The apparatus of claim 85 where the changes by element of value' further comprise value driver changes.

88. (previously presented) The apparatus of claim 85 wherein one or more aspects of current operation financial performance are optimized for a specified point in time within a sequential series of points in time.

89. (previously presented) The apparatus of claim 85 wherein a Markov Chain Monte Carlo model is used to identify the changes that will optimize one aspect of current operation financial performance, genetic algorithms are used to identify changes that will optimize one or more aspects of current operation financial performance or multi-criteria optimization models are used to identify the changes that will optimize two or more aspects of current operation financial performance.

90. (currently amended) The apparatus of claim 85 ~~where the net~~wherein a contribution of each element of value to ~~-~~current operation financial performance further comprises a net contribution comprised of a direct element of value contribution ~~net of an impact~~to financial performance and one or more impacts on other elements of value.

91. (currently amended) The apparatus of claim 85 wherein analyzing the data to create a model of current operation financial performance further comprises creating a plurality of item performance indicators and completing analyses selected from the group consisting of an item performance indicator creation op, a value driver candidate selection analysis, a value driver identification and analysis, a contribution summary measure development analysis and a component of value model development analysis.

92. (previously presented) A method for current operation optimization, comprising:
    converting and integrating historical and forecast transaction data for a commercial enterprise in accordance with a common data dictionary,
    using neural network models to identify one or more performance indicators for each of one or more elements of value,
    identifying one or more value drivers from said indicators and defining a contribution summary for each element of value for each component of value using said value drivers,
    creating a model of current operation financial performance by element and component of value using said contribution summaries, and
    simulating a current operation financial performance using said model as required to identify changes by element of value that will optimize one or more aspects of current operation financial performance
        where the elements of value are selected from the group consisting of brands, customers, employees, intellectual capital, partners, vendors, vendor relationships and combinations thereof, and
        where the model of current operation financial performance supports automated analysis through computational techniques.

93. (previously presented) The method of claim 92 where the aspects of financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof.

94. (previously presented) The method of claim 92 where the contribution summaries further comprise value drivers and combinations of value drivers and where the contribution of each element of value to current operation financial performance further comprises a direct element contribution net of an impact on other elements of value.

Serial No. 09/761,671   - 8 -   Examiner: Yehdega Retta
                                                          Art Unit: 3622

95. (previously presented) The method of claim 92 where enterprise related transaction data are obtained from the group consisting of advanced financial systems, basic financial systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, the Internet and combinations thereof.

96. (previously presented) The method of claim 92 where the components of value are selected from the group consisting of revenue, expense, capital change and combinations thereof.

97. (currently amended) A business event network model, comprising
   a network model that connects one or more elements of value to a value of an aspect of current operation financial performance for a commercial enterprise over a period of time

   where each of one or more inputs nodes to said model are specific to an element of value and a node an input node value for each time period is derived from is derived from actual and forecast business event data, and
   where the elements of value are selected from the group consisting of brands, customers, customer relationships, employees, employee relationships, intellectual capital, partners, vendors, vendor relationships and combinations thereof.
   where the network model identifies a relative contribution of each of one or more elements of value to an aspect of enterprise financial performance where said contribution comprises a direct element contribution to an aspect of financial performance net of an impact on one or more other elements of value,
   where the network model further comprises a causal network model that supports automated analysis through computational techniques, and
   where the aspects of financial performance are modeled only after removing data associated with real options and are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value and combinations thereof.

98. (previously presented) The model of claim 97 wherein business event data further comprise transactions.

99. (previously presented) The model of claim 97 that enables activities selected from the group consisting of an identification of business event changes that will optimize one or more

Examiner: Yehdega Retta
Art Unit: 3622

aspects of enterprise financial performance, a production of usable forecasts without the need for a separate reconciliation system, a valuation of element contribution to current operation value, a quantification of element impact on aspects of financial performance, an optimization of future current operation value and combinations thereof.

100. (previously presented) The model of claim 97 that further comprises a neural network model.

101. (new) The model of claim 97 wherein a network model further comprises a causal network model that supports automated analysis through computational techniques and identifies a relative contribution of each of one or more elements of value to an aspect of enterprise financial performance.

102. (new) The model of claim 97 wherein an aspect of current operation financial performance is modeled only after removing data associated with all enterprise growth options.

103. (new) The model of claim 97 wherein an aspect of current operation financial performance is selected from the group consisting of revenue, expense, capital change, cash flow, future value, value, raw material expense, manufacturing expense, service delivery expense, sales expense, support expense, other expense, change in cash, change in non-cash financial assets and combinations thereof.

104. (new) A method for running a smart enterprise, the enterprise experiencing a plurality of events in association with its operation, the method comprising:
    aggregating a plurality of information related to the plurality of events in a central repository;
    datamining at least a portion of the information related to the plurality of events as required to identify one or more value drivers for each of one or more elements of value of said enterprise,
    creating a time series network model for each of one or more aspects of enterprise financial performance using said value drivers by element of value
        where the one or more aspects of enterprise financial performance are selected from the group consisting of revenue, expense, capital change, cash flow, future value, value, raw material expense, manufacturing expense, service delivery expense, sales expense,

support expense, other expense, change in cash, change in non-cash financial assets and combinations thereof.

105. (new) The method of claim 104 that further comprises using at least one of the models of an aspect of enterprise financial performance to identify one or more changes in enterprise operation that will improve performance.

106. (new) The method of claim 104 wherein one or more elements of value are selected from the group consisting of brands, customers, customer relationships, employees, employee relationships, intellectual capital, intellectual property, partners, processes, vendors, vendor relationships and combinations thereof.

107. (new) The method of claim 104 wherein a central repository further comprises an application database that makes the data accessible and available for extraction and analysis so as to provide a coherent view of the event information for an enterprise.

108. (new) The method of claim 104 wherein aggregating a plurality of information related to the plurality of events further comprises integrating said event data in accordance with a common schema that includes a common data dictionary that defines common attributes selected from the group consisting of elements of value, components of value, currencies, units of measure, time periods, dates and combinations thereof.

109. (new) The method of claim 104 wherein datamining the information related to the plurality of events further comprises initializing and evolving a series of predictive models for each of one or more aspects of enterprise financial performance with a genetic algorithm.

110. (new) The method of claim 109 wherein evolving a series of predictive models further comprises completing processing steps selected from the group consisting of fitness measure re-scaling, random mutation, recalibrating target fitness levels, selective crossover, selective carry-forward and combinations thereof.

111. (new) The method of claim 109 wherein a series of predictive models further comprises a series of network models where said models support financial performance optimization through computational techniques.

Serial No. 09/761,671   - 11 -

Examiner: Yehdega Retta
Art Unit: 3622

112. (new) The method of claim 104 wherein a plurality of information related to the plurality of events further comprises transaction data aggregated from databases for systems selected from the group consisting of a basic financial system, a human resource system, an advanced financial system, a sales system, an operations system, an accounts receivable system, an accounts payable system, a capital asset system, an inventory system, an invoicing system, a payroll system, a purchasing system, an Internet and combinations thereof.

113. (new) The method of claim 104 wherein a time series network model further comprises a causal time series network model.

114. (new) The method of claim 104 wherein a time series network model identifies an impact on an aspect of financial performance for each of one or more elements of value over a period of time.

115. (new) The method of claim 104 wherein the method further comprises
  calculating a value for each of one or more enterprise growth options,
  using the time series network models to identify a value contribution for each of the elements of value, and
  reporting a value of the enterprise by a subset of value where the subsets of value are elements of value and at least one other subset of value selected from the group consisting of tangible assets, growth options and combinations thereof using a paper document or an electronic display.

116. (new) The method of claim 115 wherein the method further comprises reporting a value of a tangible asset subset of value and an element of value subset of value in a balance sheet format by tangible asset and element of value
  where the tangible assets are selected from the group consisting of accounts receivable, cash, inventory, marketable securities, prepaid expenses, production equipment and combinations thereof, and
  where the elements of value are selected from the group consisting of brands, customers, customer relationships, employees, employee relationships, intellectual capital, partners, processes, vendors, vendor relationships and combinations thereof.

Serial No. 09/761,671   - 12 -   Examiner: Yehdega Retta
                                                              Art Unit: 3622

PAGE 14/24 * RCVD AT 12/29/2005 1:07:13 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-6/26 * DNIS:2738300 * CSID:14254918311 * DURATION (mm-ss):08-42

117. (new) The method of claim 115 wherein a growth option further comprises a real option for growth.

118. (new) The method of claim 115 where the method further comprises tracking changes in enterprise value by subset of value over a sequential period of time and using that information to report changes of value by subset of value, tangible asset and element of value using a paper document or electronic display in an income statement or cash flow statement format
    where the elements of value are selected from the group consisting of brands, customers, customer relationships, employees, employee relationships, intellectual capital, partners, processes, vendors, vendor relationships and combinations thereof.

Serial No. 09/761,671   - 13 -   Examiner: Yehdega Retta
                                                                        Art Unit: 3622